What is claimed is:

1. An anastomotic connector comprising:

a fitting having a tubular portion with a proximal end and a distal end, and wherein at least one self-expanding petal is disposed on the tubular portion distal end, said petal adapted to compress into a low profile for insertion through a sheath and to self-expand towards at least one resting geometry upon advancing beyond a sheath distal end.

- 2. The fitting of claim 1 additionally comprising a ring adapted for compressing a vessel wall between the petal and the ring.
- 3. The fitting of claim 1 wherein the petal forms an angle of between about 30 degrees and 150 degrees with a longitudinal axis of the fitting tubular portion when the petal is in the resting geometry.
- 4. The fitting of claim-1 additionally comprising a graft attached to the fitting tubular portion.
- 5. The fitting of claim 4 additionally comprising a retaining ring disposed about the graft where the graft is attached to the fitting tubular portion.
 - 6. An anastomotic connector comprising:
- a fitting having a tubular portion with a proximal end and a distal end; at least two opposed self-expanding axial petals disposed on the tubular portion distal end, each of said axial petals adapted to compress into a low profile for insertion through a sheath and self-expand in opposite directions to form an angle of

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between about 30 degrees and 150 degrees with a longitudinal axis of the tubular portion upon advancing beyond the distal end of the sheath; and

at least two opposed self-expanding radial petals adapted to compress into a low profile for insertion through a sheath and self-expand to extend radially in a substantially circular profile upon advancing beyond the distal end of the sheath.

- 7. The connector of claim 6 wherein the distal ends of the radial petals substantially overlap when the petals are in the self-expanded condition.
- 8. The connector of claim 6 additionally comprising two additional radial petals.